

Title (en)

OPTICAL DETECTION SYSTEM AND METHOD CAPABLE OF AUTOMATICALLY REMOVING FOREIGN SUBSTANCES

Title (de)

OPTISCHES DETEKTIONSSYSTEM UND VERFAHREN ZUR AUTOMATISCHEN ENTFERNUNG VON FREMDSTOFFEN

Title (fr)

SYSTÈME ET PROCÉDÉ DE DÉTECTION OPTIQUE CAPABLES D'ÉLIMINER AUTOMATIQUEMENT DES SUBSTANCES ÉTRANGÈRES

Publication

**EP 4057045 A1 20220914 (EN)**

Application

**EP 22161124 A 20220309**

Priority

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Abstract (en)

The present invention provides an optical detection system and a method capable of automatically removing foreign substances. The optical detection system comprises an optical sensing device including a housing, a transparent cover, an optical sensor, a lens module, a sealing material having flexibility and stiffness, and a piezoelectric component. The sealing material with an annular flake shape is provided between the transparent cover and the piezoelectric component, and extended and fixed to the housing to seal the internal space defined by the housing and the transparent cover. The piezoelectric component performs vibration, which is transmitted to the transparent cover through the sealing material to remove foreign substances from the transparent cover. Thereby, an excellent removing ability for foreign substances can be achieved by effective vibration transmission, and effects of reducing load and power consumption, prolonging service life, and preventing leakage of moisture or water can also be achieved.

IPC 8 full level

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Citation (applicant)

- US 11002954 B2 20210511 - KURATANI YASUHIRO [JP], et al
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Citation (search report)

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Designated extension state (EPC)

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